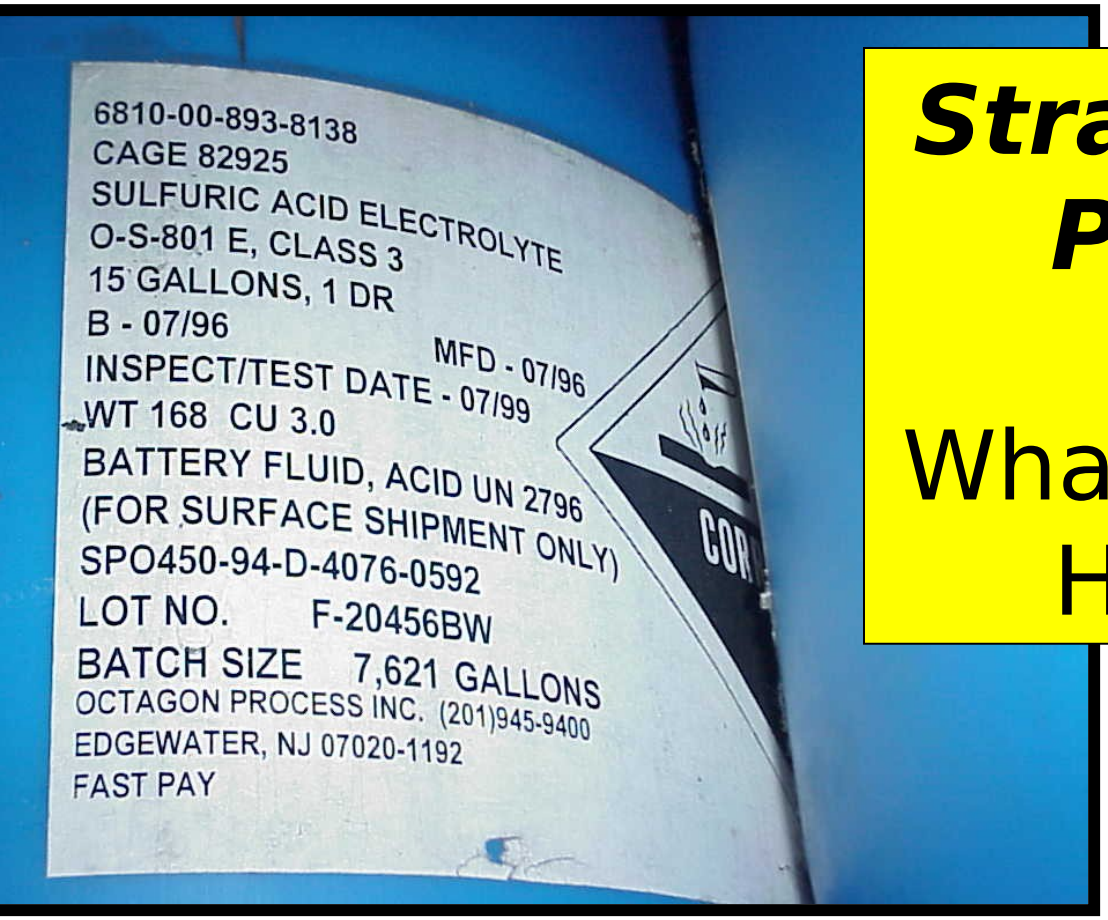
Army Europe Dangerous Goods Advisor Program



Strategic Force Projection

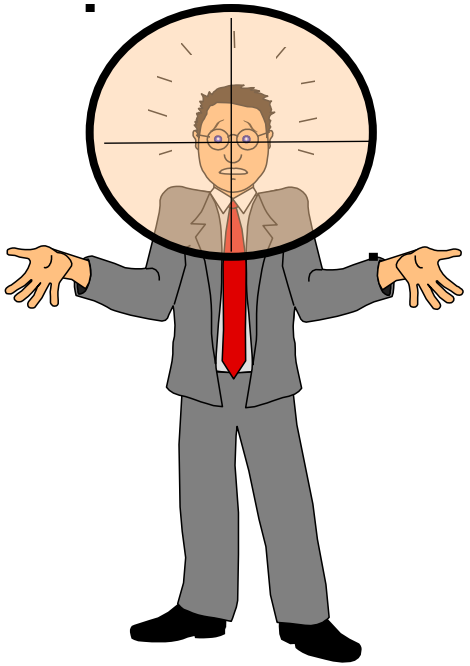
What do I do with HAZMAT?!?

Dave Scott
USAREUR Safety
370-6200

Purpose

- What’s my role?
- What do I need to know?

- Presentation 40 minutes
- Questions/discussion 10 minutes



HINT: “One team, one fight

Strategic Deployment and Redeployment

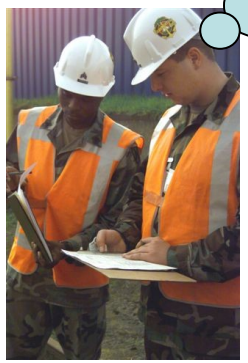
- Road -- Mil and Contractor
- Rail/Inland Waterway
- SEA or AIR
- ROAD / Rail / Inland Waterway

HINT: Think “WHEN?”, not “i

What is *HAZMAT*?

More specifically -- HAZMAT for *transportation*

- UN specific definitions
  - CLASS 1 – 9
- Additional rules by MODE
  - Marine Pollutant



Hey SGT Bruker, is engine antifreeze HAZMAT for transport?!? How 'bout motor oil?!?

Advice: Don't purport yourself to be an expert if you're not trained and *current*

Key Players

- **SAFETY** – always in an advice & over watch mode. Know enough to advise, seek help, see major problems; timely nudge; raise the flag

- **Unit Movement Officer** – Team leader -- responsible overall for planning & preparing unit movement – has hands–on training; trains load teams but has full time job

- **HAZMAT Certifier** X 2 per Unit ("*HAZ12*") – trained; correct regulations on hand; materials correctly identified, described, documented and loaded; trains load teams but has full time job

HINT: Prepare in advance

Key Players

- **Supply Officer/NCO** – HAZMAT inventory, MSDS, packaging, procure placards, restraint materials

- **Maintenance Officer/NCO** -- HAZMAT inventory, MSDS; vehicle annual certification

- **BSB Safety** – assistance at railhead/training, ISA, and may have HAZMAT certification and tools

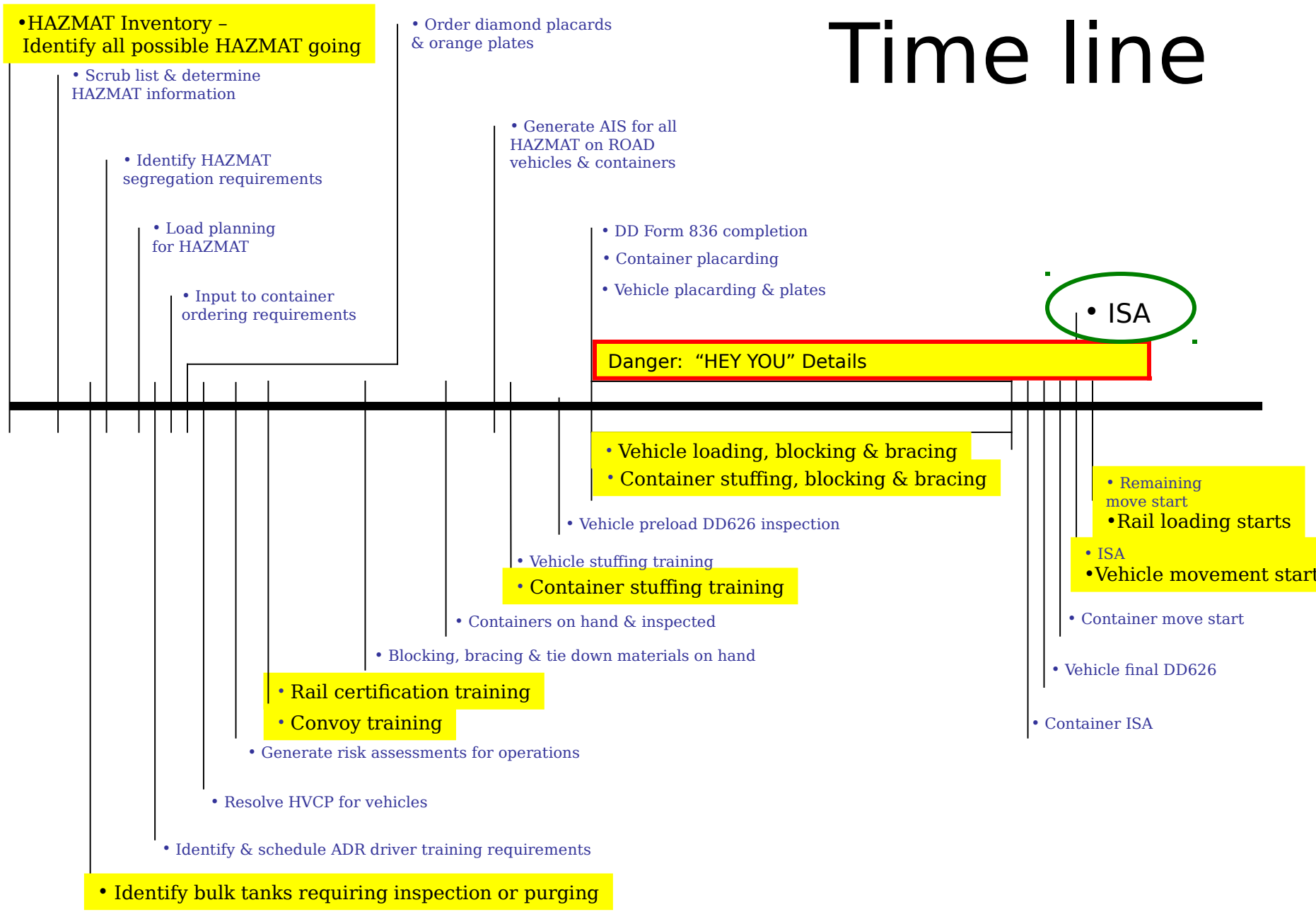
HINT: Push HAZMAT inventory update

Key Players

- **“HEY YOU!” parties –**
  - ***Where are the best planning goes bad***
  - **Container loading**
  - **Rail loading**
  - **Convoy operations**
  - Risk assessment followed by ACTION
  - Skills training – in advance

HINT: Create a team vs. HEY YO
HINT: Prepare in advance

Relative timeline for preparing to deploy HAZMAT:


Time line
•HAZMAT Inventory – Identify all possible HAZMAT going
• Scrub list & determine HAZMAT information
• Identify HAZMAT segregation requirements
• Load planning for HAZMAT
• Input to container ordering requirements
• Order diamond placards & orange plates
• Generate AIS for all HAZMAT on ROAD vehicles & containers
• DD Form 836 completion
• Container placarding
• Vehicle placarding & plates
• ISA
Danger: "HEY YOU" Details
• Vehicle loading, blocking & bracing
• Container stuffing, blocking & bracing
• Remaining move start
•Rail loading starts
• ISA
•Vehicle movement start
• Vehicle preload DD626 inspection
• Vehicle stuffing training
• Container stuffing training
• Containers on hand & inspected
• Blocking, bracing & tie down materials on hand
• Container move start
• Vehicle final DD626
• Container ISA
• Rail certification training
• Convoy training
• Generate risk assessments for operations
• Resolve HVCP for vehicles
• Identify & schedule ADR driver training requirements
• Identify bulk tanks requiring inspection or purging

Material Safety Data Sheet
Example: JP8 from Conoco

==========

Transportation Information

==========

Responsible Party Cage: 5R396
Product ID: JP-8 AVIATION TURBINE FUEL
MSDS Prepared Date: 11/26/1998
Review Date: 08/21/2001
Net Unit Weight: BULK

4 years out of date

==========

Detail DOT Information

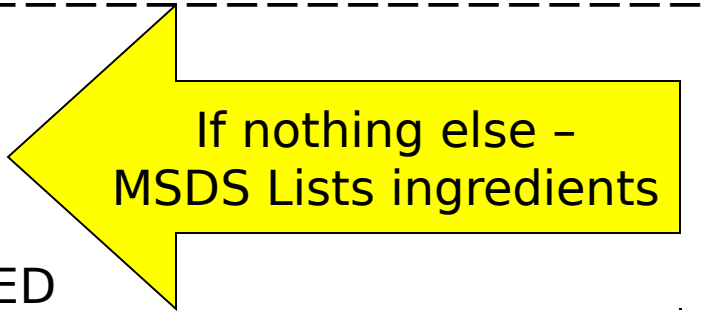
==========

DOT Proper Shipping Name: FUEL, AVIATION, TURBINE ENGINE
Hazard Class: 3
UN ID Num: UN1863
DOT Packaging Group: III
Label: FLAMMABLE LIQUID

Some revised MSDS don't have this info

Example: Conoco JP8

==========
Ingredients
==========
Cas: 8008-20-6
RTECS #: OA5500000
Name: KEROSENE
> Wt: 90%.
Other REC Limits: NONE ESTABLISHED
OSHA PEL: 500 PPM, 2000 MG/M3
ACGIH TLV: NONE ESTABLISHED

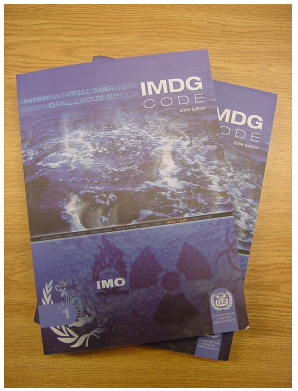


How does US 49 CFR Relate?

- It doesn't. 49 CFR applies in CONUS
- It ***may*** apply in an OCONUS AOR if:
  - There are no host-nation rules to apply or host nation agrees
  - The operation lead nation agrees
  - Anarchy rules

HINT: Multinational forces need an agreement to determine how they will cooperatively transport HAZMAT

What Rules Do Apply?



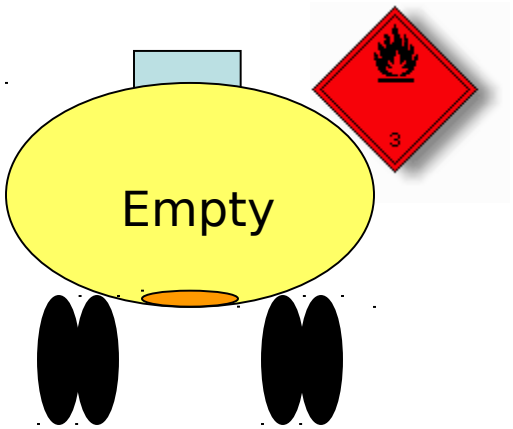
- **SEA** – International Maritime Dangerous Goods Code, as applied at the ship loading location (Harbor rules) and shipping company

- **Road** – European Agreement .. Dangerous Goods by Road (ADR)
- **Rail** -- European Agreement .. Dangerous Goods by Rail (RID)
- **Inland Waterway (barge)** -- European Agreement .. Dangerous Goods by Navigable Rivers (ADN)

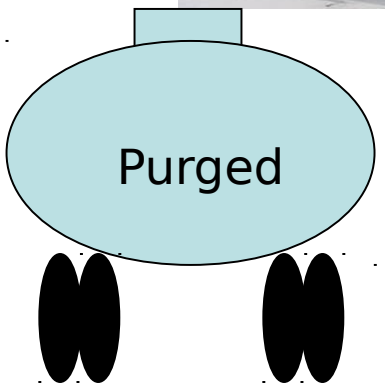
- **Air** – International Civil Aviation Organization (ICAO/IATA) and NATO STANAG 3854 and Host nation agreements (Germany allows JM 24-204 for MILAIR)

Tank vehicles

- Empty
- Per movement order – probably purged



Residual fuel and fumes



Clean with purge certification

HINT: 29th Supp Gp -- Maint Act Mannhe

Uploaded vehicles (Basic Ammunition Load Stowed)

- Commanders love the idea
- Transporters are challenged
- Transited nations have final vote
  - Examples:
    - Belgian Veto for Antwerp (1AD)
    - Turkish Veto (1ID)
  - 1.4S small arms reasonably possible
  - Larger creates political and transport challenges
  - No extra; must be in racks/secured IAW TM

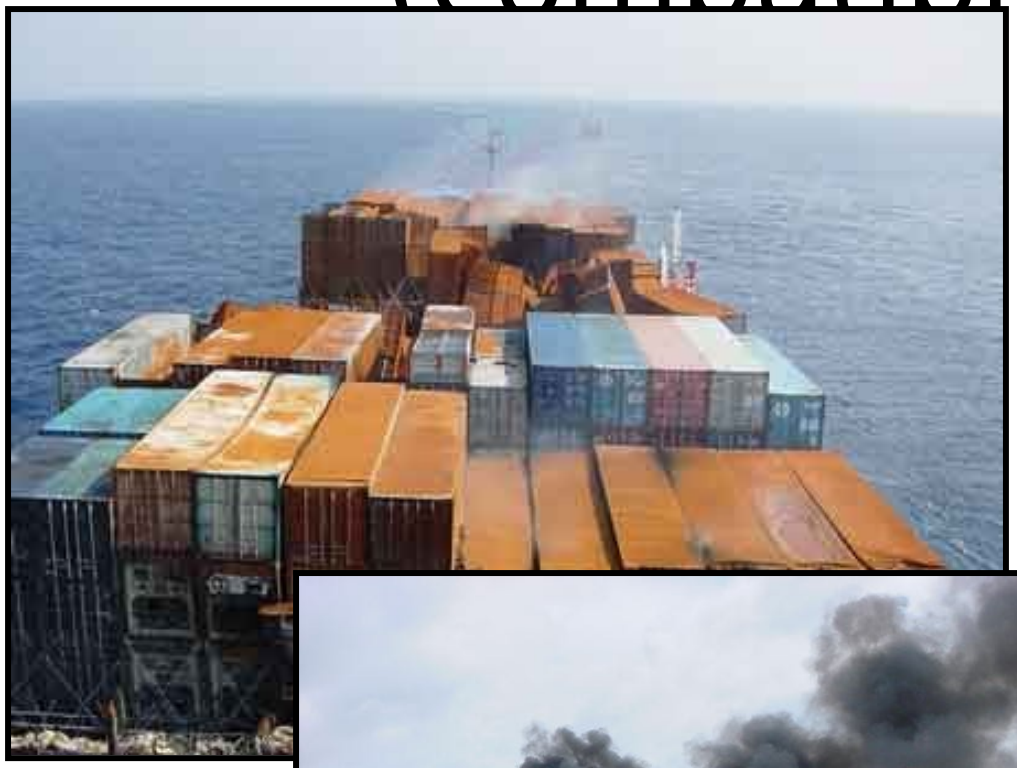
HINT: Advise against; argue for containerized shipment with upload at destination

Load Planning

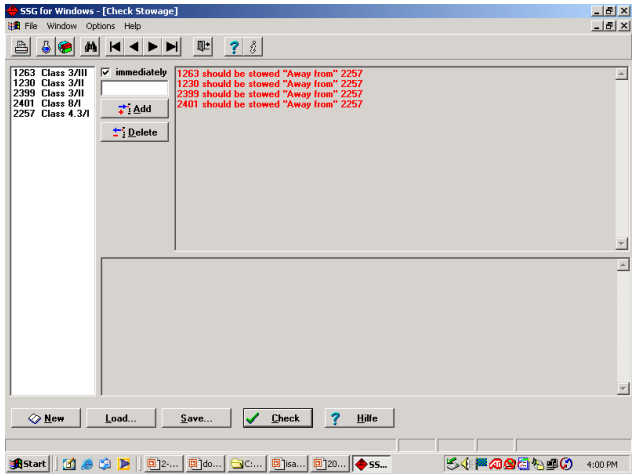
- Determine all HAZMAT from inventory
- Pre determine what can and cannot be loaded together – segregation and separation
- Establish load plans
- Identify block & brace materials and placarding requirements
- Train loaders

HINT: Prior planning reduces stress
HINT: Only ship HAZMAT in containe

Mixed loading (compatibility)



- Road and rail are easy
- **Sea is very difficult:**
  - **“Segregation” and**
  - **“Separation”**



HINT: Load plans developed meeting SEA criteria

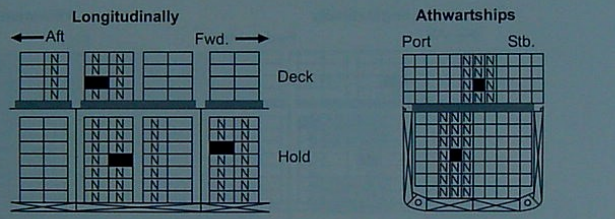
Mixed loading -- SEA

S-A	Category B. Keep as cool as reasonably practicable. Clear of living quarters.	Crysta when by sk
S-A	Category A. Keep as cool as reasonably practicable. Clear of living quarters. "Separated from" class 5.1.	Liqui oxidiz highly skin
S-A	Category A.	Tan-c Deco if swa carrie

- Stowage Category – Where I can physically locate the load unit aboard ship

- Separation requirements form other materials For example:

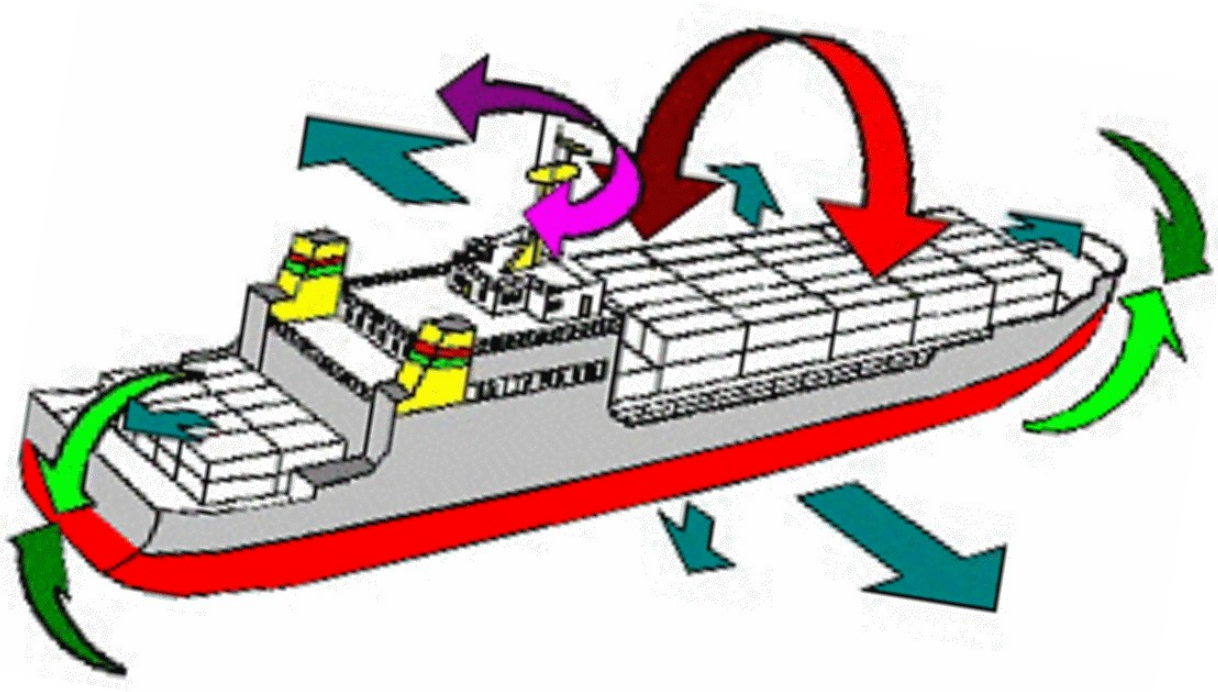
"SEPARATED FROM" .2			
CLOSED VERSUS CLOSED	HORIZONTAL		VERTICAL
	ON DECK	UNDER DECK	
FORE AND AFT	One container space	One container space or one bulkhead	NOT in the same vertical line unless segregated by a deck
ATHWARTSHIPS	One container space	One container space	



2 – Situation *closed versus closed*

Note: All bulkheads and decks shall be resistant to fire and liquids.

HINT: Easiest rule – don't load 2 materials in same load unit with different restrictions



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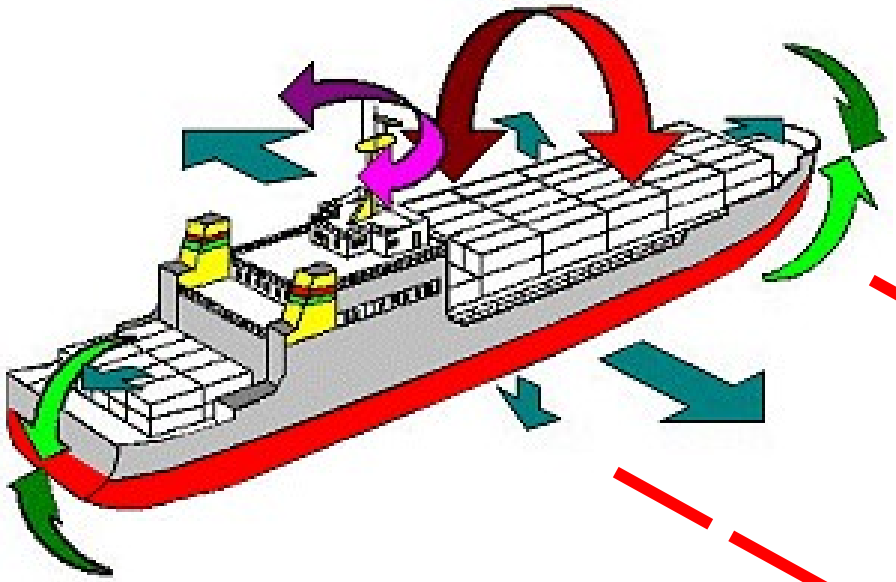
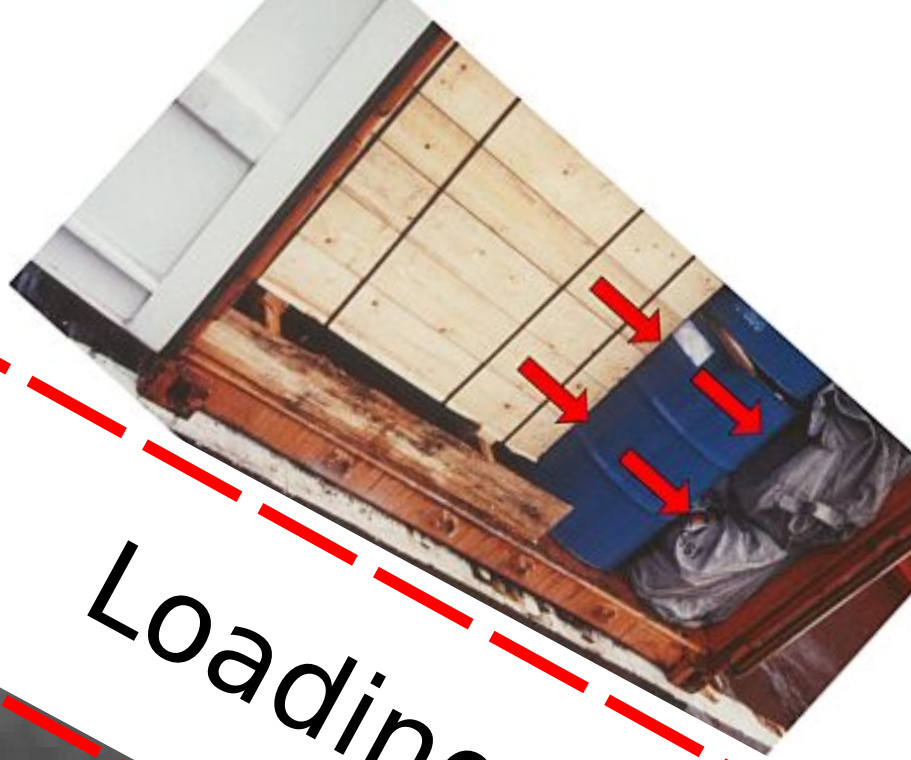
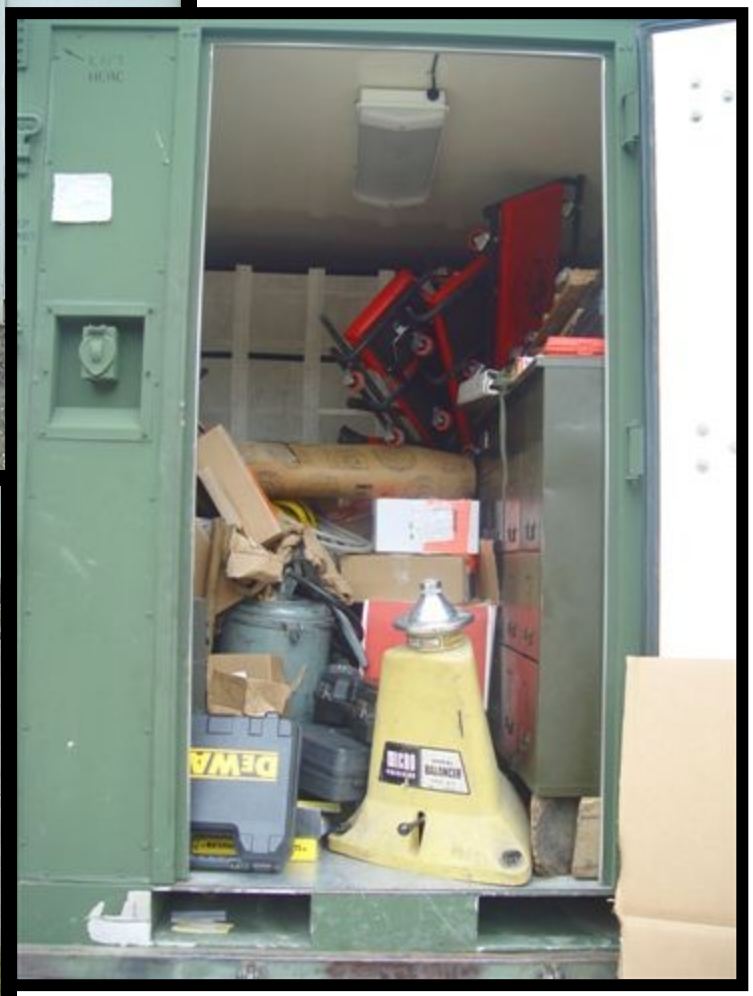




Loading

Loading

- Inspection
- Loading
- certifying



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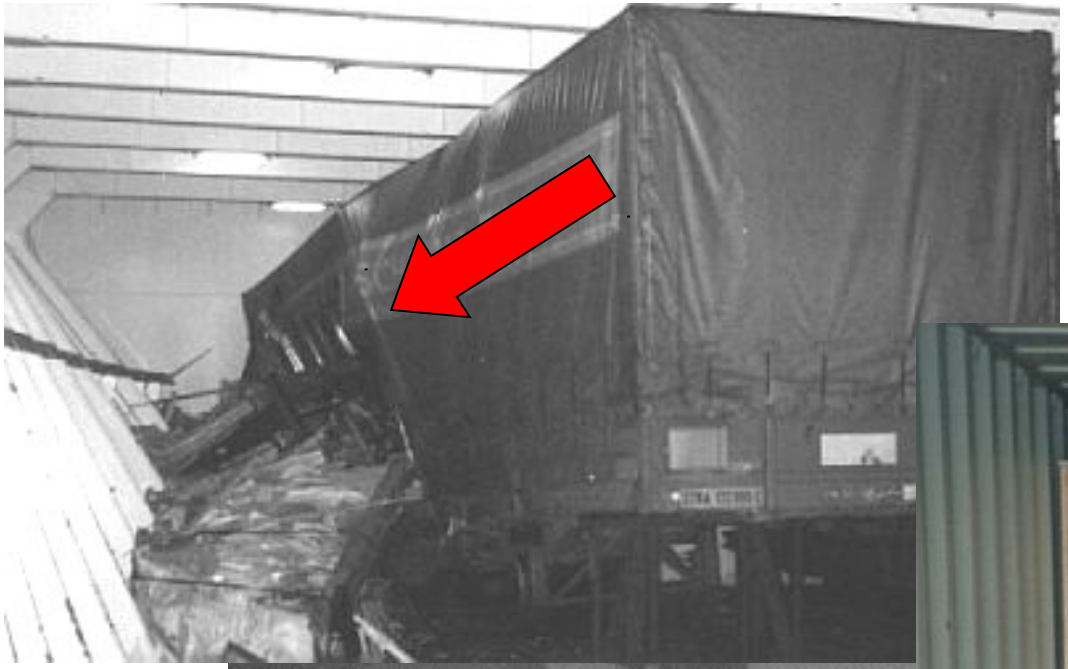
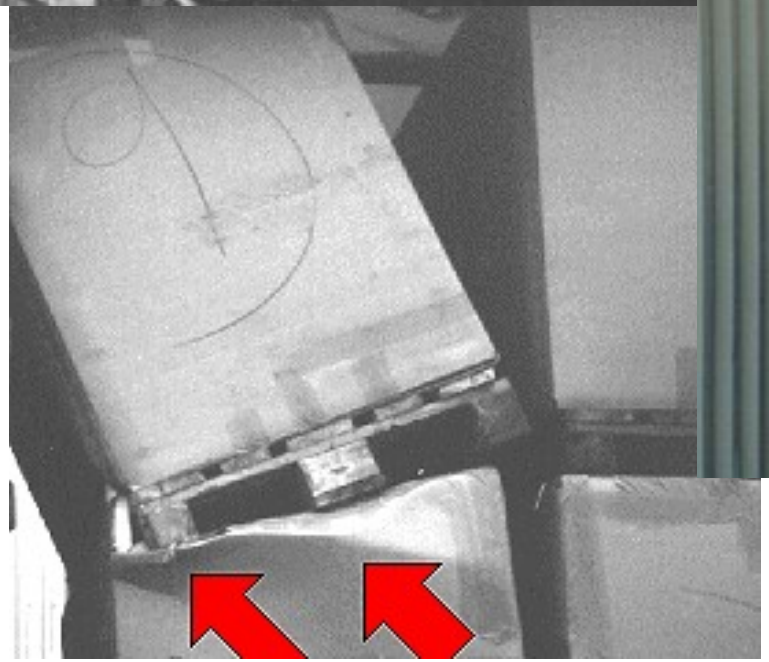




HINT: Train to load, load to surviv

Placarding

- Difficult concept – *these are only generalizations*
- If by road, must use ADR (orange plate)
  - Placard only explosives and tank vehicles

both sides & rear only

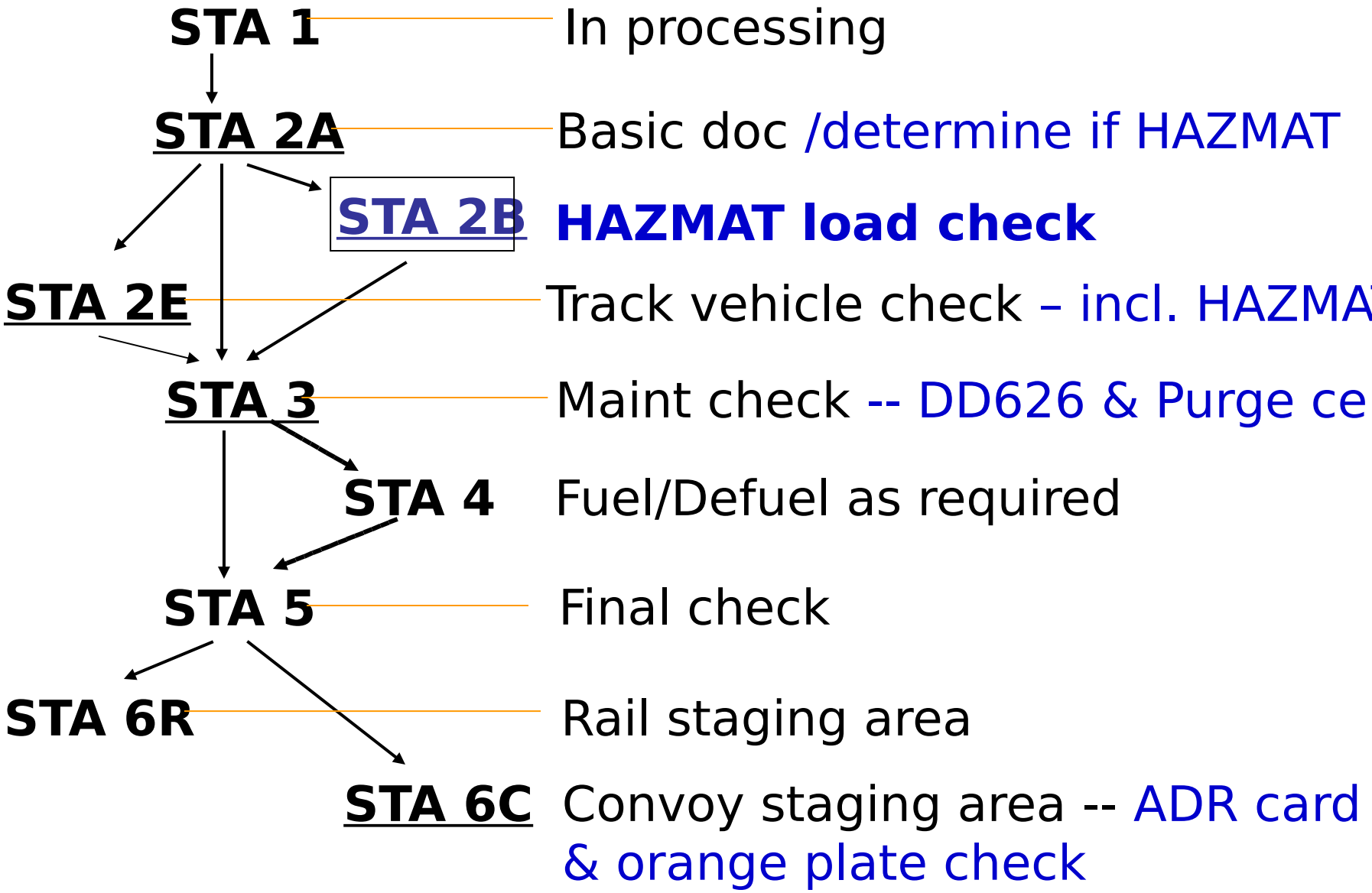
Rear Plate

- Containers always placarded all 4 sides
- Rail always placarded 2 sides of car
- Then by SEA, must placard vehicles for sea, similar to container rule

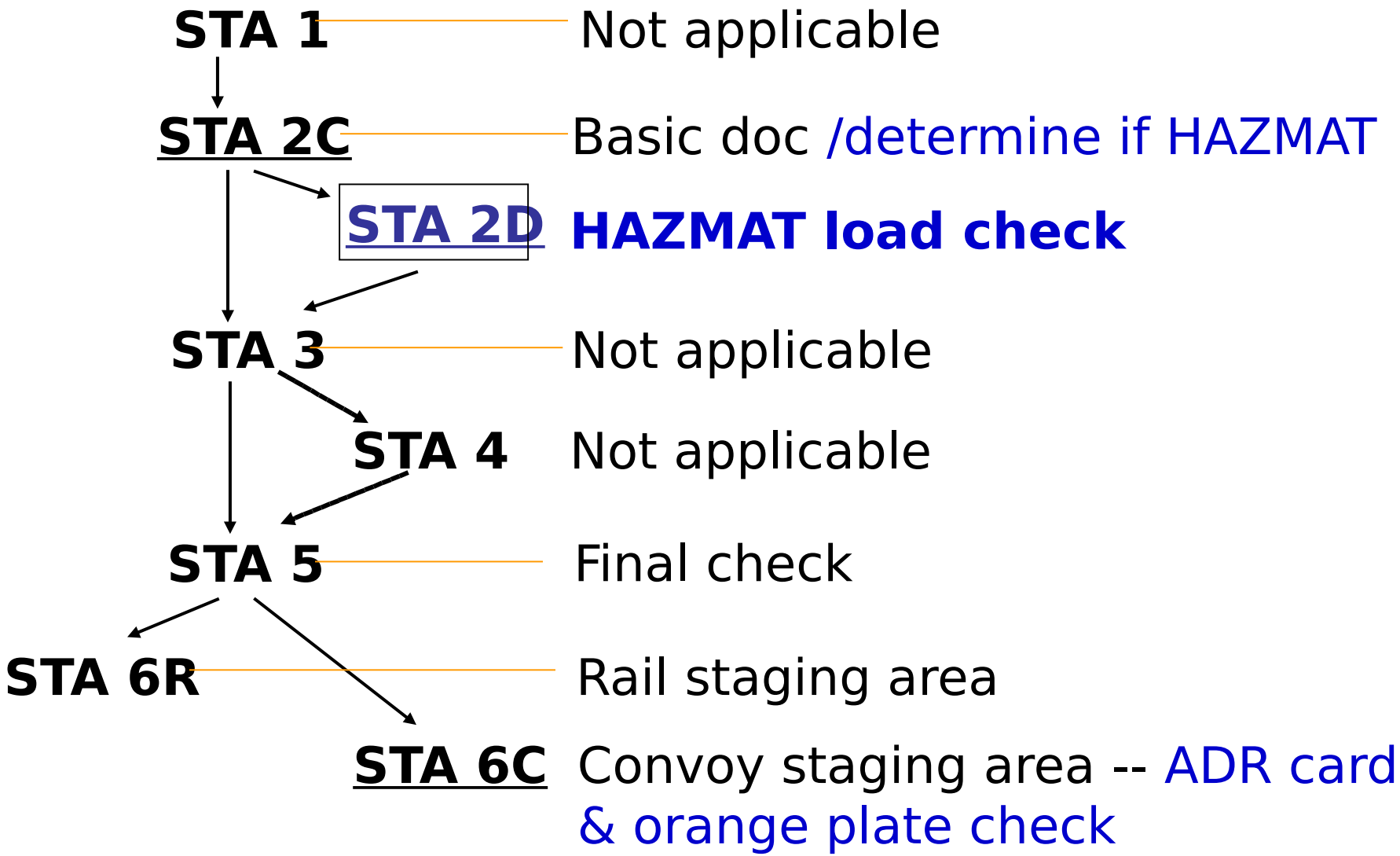
HINT: Euro rules differ from

ISA Operations

VEHICLE PROCESSING – HAZMAT POINTS



CONTAINER PROCESSING – HAZMAT POINTS



Documentation = HAZ 12

ISA STATION 2B

CHALK #_____ **Vehicle ID #** _____

STATION 2B: DOCUMENTATION FOR VEHICLES WITH HAZMAT

Start Time: _____ Finish Time: _____

Items to Check	Go/No
In addition to the shipping document packet, the following is required:	
• **2 copies of DD Form 1384** Transportation Control Movement Document, **with HAZMAT Statement**	
• **2 copies of DA Form 5748** Load diagram/packing list	
• **3 copies of DD836** with statement "Carriage in accordance with 1.1.4.2", Blk 6 verified against the load plan or physical inspection, and Blk 12 Vehicle Packing Declaration signed with printed name	
• **1 copy of form 626** Motor vehicle inspection sheet	
• **1 copy of AE 5988-E with Waiver 27 stamp (HVCP)** not more than 12 months old (for vehicles driving on roads)	
• **1 copy of Accident Information Sheet (AIS) for each HAZMAT UN number, in language of driver & each nation driven in**	
Is the vehicle placarded 4 sides as required? (orange plated front & rear if it drive on the road out of the ISA?)	
Have oxygen and acetylene been removed from all vehicles?	
Is HAZMAT annotated on UDL?	

REMARKS: _____

_____

_____

_____

_____

Inspector's Initials _____

November 28, 2003

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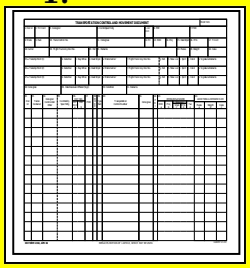

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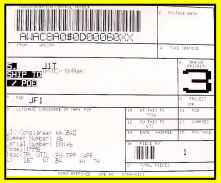

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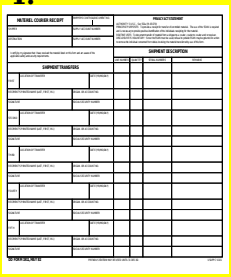

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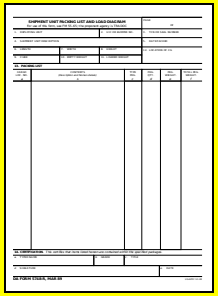

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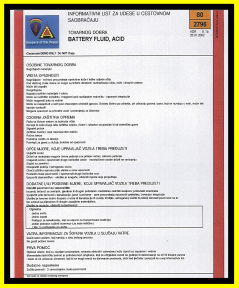

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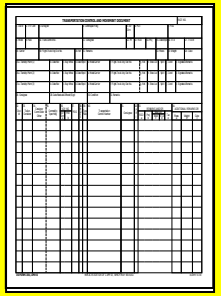

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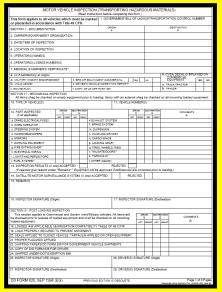

HINT for every day: ALL transports of HAZMAT require a proper transport document

Keyes to success

Show interest in achieving success

HINT: “One team, one fight”

HINT: Think “WHEN?”, not “if”.

Advice: Don’t purport yourself to be an expert if you’re not trained and *current*

HINT: Push HAZMAT inventory updates

HINT: Create a team vs. HEY YOU!
HINT: Prepare in advance

HINT: Multinational forces need an agreement to determine how they will cooperatively transport HAZMAT

HINT: Know Purging 29th Supp Gp -- Maint Act Mannheim

Keyes to success

HINT: Advise against uploading; argue for containerized shipment with upload at destination

HINT: Know Euro rules differ from US

HINT: Push prior planning to reduce stress
HINT: Only ship HAZMAT in containers

HINT: Load plans developed meeting SEA criteria

HINT: Easiest rule – don't load 2 materials with different restrictions in same load unit

HINT: Train to load, load to survive

HINT for every day: ALL transports of HAZMAT require a proper transport document – HAZ 12/15 is full time

Available tools & help

- **USAREUR G3 MOC Website** (ISA material)
- **21st TSC website** (Deployment info & railhead training package)
- **USAREUR Safety Website** (many resources)
- **AE Reg 525-1** (Planning & execution)
- **AE PAM 385-15** series (Risk mgt & training)
- **Army Europe Summer Safety Campaign**
- **AE Reg 55 series**
- **TC 21-305** Wheeled Vehicle Driver (load securing & CG)
- **FM 55-80** Container Operations (App D – loading)
- HAZ 12 and UMO Course Handouts

Training

HAZ 11 – certifies drivers (must have cert to drive orange plated vehicles)

HAZ 12 – certifies HAZMAT certifiers, but not to Europe standards

HAZ 15 – (available soon) European update to HAZ 12 certification

HAZ16 – (available next year) DGA certification

CCC – Container certification by exception

Recommendations

- Make yourself part of the team
- Know who has what responsibilities and where to go for help
- Have an idea what “wrong” looks like
- Encourage HAZMAT log upkeep and further development into transport data & load plans
- Encourage loading team development for vehicles, containers and railheads
- Don’t forget the return trip
- Personal HAZMAT training could help

ANY QUESTIONS?

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